

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte EKANAYAKE A. AMERASEKERA  
and CHARVAKA DUVVURY

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Appeal No. 1997-1688  
Application 08/515,752<sup>1</sup>

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ON BRIEF

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Before URYNOWICZ, JERRY SMITH, and LALL, Administrative Patent Judges.

URYNOWICZ, Administrative Patent Judge.

Decision on Appeal

This appeal is from the final rejection of claims 28-33, all the claims pending in the application.

The invention pertains to an ESD protection circuit. Claim 28 is illustrative and reads as follows:

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<sup>1</sup> Application for patent filed August 16, 1995. According to the appellants, the application is a continuation of Application 08/242,925, filed May 16, 1994, now abandoned.

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An ESD protection circuit for protecting a device which has a power supply which is at a first voltage of approximately 3.3 volts and which interfaces with devices that have a supply voltage which is at a second voltage of approximately 5 volts, said ESD protection circuit comprising:

a bond pad, said bond pad subjected to said first voltage or said second voltage;

a switching element connected to said bond pad, said switching element becomes conductive upon the occurrence of an ESD event; and

a primary protection device connected between said switching element and ground for dissipating an ESD signal, said primary protection device is isolated from said bond pad except during said ESD events.

The references relied upon by the examiner as evidence of obviousness are:

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| Murayama             | JP-58-162065 | Sep. 26, 1983 |
| Misu et al. (Misu)   | JP-61-30075  | Feb. 12, 1986 |
| Taira                | EP-0257774   | Mar. 02, 1988 |
| Tailliet             | EP-0568421   | Nov. 03, 1993 |
| Isono et al. (Isono) | JP-5-335495  | Dec. 17, 1993 |

Claims 28-33 stand rejected under 35 U.S.C. § 103 as being unpatentable over Isono, Tailliet, Misu, Murayama or Taira.

The respective positions of the examiner and the appellants with regard to the propriety of these rejections are set forth in

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the final rejection (Paper No. 16) and the examiner's answer (Paper No. 22) and the appellants' brief (Paper No. 21) and reply brief (Paper No. 23).

### Appellants' Invention

ESD protection circuits are illustrated in Figures 2 and 5. A protection circuit includes a bond pad 14 which is subjected to a first voltage of approximately 3.3 volts or a second voltage of approximately 5 volts; a switching element connected to the bond pad, the element becoming conductive upon the occurrence of an ESD event; and a primary protection device connected between the switching element and ground for dissipating an ESD signal. In accordance with the above operation, an ESD signal is prevented from damaging input/output circuitry 18.

### Opinion

We will not sustain any of the five prior art rejections of claim 28.

In the answer, the examiner in effect acknowledges that the prior art does not teach a power supply which is at a first

voltage of approximately 3.3 volts, and devices that have a supply voltage which is at a second voltage of approximately 5 volts, as recited in the preamble of sole independent claim 28. Such being the case, the examiner takes the position that the preamble is merely a statement of intended use for the ESD protection circuit which is entitled to no patentable weight in a claim such as claim 28 drawn to structure. In the reply brief, appellants take issue with this position.

We are not persuaded by the examiner's position. The first recitation in the body of the claim refers to "said first voltage" and "said second voltage". Thus, the words in the preamble provide antecedent basis for terms used in the body of claim 28 and are necessary to give meaning to the claim. Gerber Garment Tech., Inc. v. Lectra Sys., Inc., 916 F.2d 683, 689, 16 USPQ2d 1436, 1441 (Fed. Cir. 1990).

The examiner's position to the effect that it would have been obvious that the protection circuits of the prior art could have been used for dual supplies of approximately 3.3 and 5 volts and that appellants have failed to prove otherwise is also not persuasive. The burden is initially on the examiner to establish a prima facie case of obviousness. Here, the examiner has not

shown through evidence that any of the circuits in the prior art cited against the claims would operate at approximately 3.3 and 5 volts. For example, in discussing the operation of his device at page 5, Isono refers to relatively high breakdown voltages of 250 and 350 volts and this suggests that Isono would not be operable at the low voltages intended by appellants. Furthermore, the mere fact that the prior art may be modified in the manner suggested by the examiner does not make the modification obvious unless the prior art suggested the desirability of the modifications. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783, 1784 (Fed. Cir. 1992). The examiner has not established that any one of the references applied against claim 28 suggests any motivation for, or desirability of, the change espoused.

Although we will not sustain any of the rejections of claim 28, we agree with the examiner that each of Isono, Misu and Murayama discloses the switching element and primary protection device limitations defined in claim 28.

Whereas we will not sustain any of the rejections of claim 28, we will not sustain any of the rejections of dependent claims 29-33 over the same prior art.

REVERSED

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| Administrative Patent Judge | ) |                 |
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| PARSHOTAM S. LALL           | ) |                 |
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